October 2003



# Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock (TV-11b)

## **Project Status**

**Approved Date:** 2000 **Project Area:** 285 acres **Approved Funds:** \$1.5 M **Total Est. Cost:** \$25.1 M

Net Benefit After 20 Years: 241 acres

**Status:** Engineering and Design **Project Type:** Shoreline Stabilization

#### Location

The project is located in Vermilion Parish, Louisiana, along the eastern bank of the Freshwater Bayou Canal between Freshwater Bayou Lock and Belle Isle Bayou.

#### **Problems**

In 1960, the U.S. Army Corps of Engineers was authorized to construct a navigation channel from mile 161.2 of the Gulf Intracoastal Waterway south to the Gulf of Mexico. The present channel is 600 feet wide because of wakes from boat traffic. In the reach of the canal between Freshwater Bayou Lock and Belle Isle Bayou, breaches in the bank have developed at numerous locations.

The breaches are allowing boat wakes and hydrologic action to adversely affect the interior marsh east of the canal. Turbid, higher salinity water is entering the interior marsh, causing marsh loss and decreasing coverage of submerged aquatic vegetation. The wakes from passing vessels and tidal action are causing the export of organic material from the project area. A large area of interior marsh in the northern part of the project area is breaking apart and turning into open water. The effects of shoreline erosion are a direct conversion of marsh to open water and an increase in the introduction of higher salinity waters to formerly fresh and intermediate marshes.

## **Restoration Strategy**

The objective of the project is to halt bank erosion through the construction of a stone dike on the eastern bank of Freshwater Bayou Canal between Belle Isle Bayou and Freshwater Bayou Lock. The dike would reduce the amount of water exchange between the canal and interior marshes and protect the marshes from erosion.

A 40,000 foot-long rock dike is being constructed. The dike will be continuous except for openings left at the mouths of several oil well canals where the dike will be tied into the bank on both sides of each canal.

## **Progress to Date**

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved funding for engineering and design at the January 2000 Task Force meeting. A 30% design review was held in June 2002.

This project is on Priority Project List 9.



Looking north up Freshwater Bayou Canal toward Humble Canal.

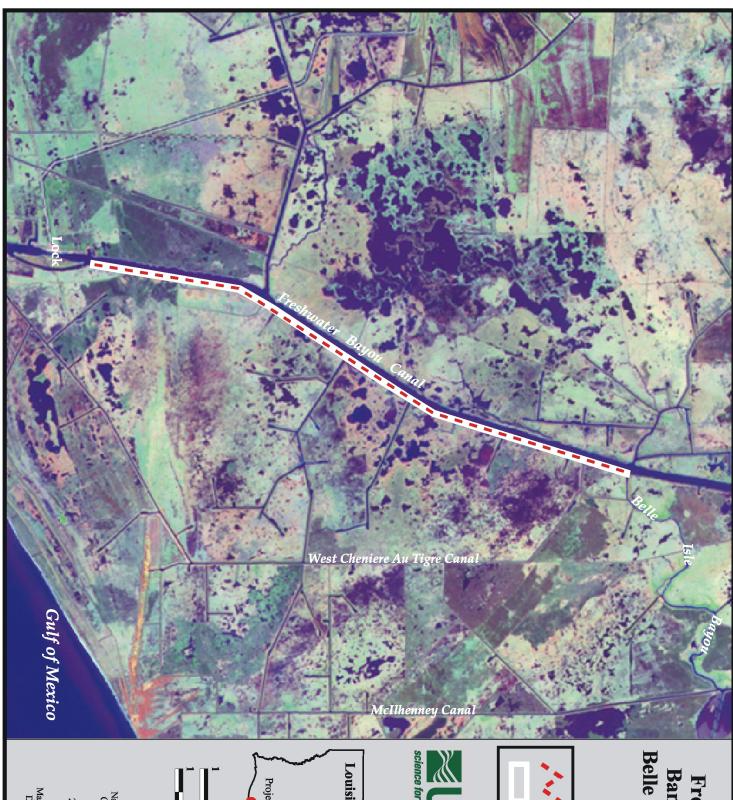
 $For \ more \ project \ information, \ please \ contact:$ 



**Federal Sponsor:** U.S. Army Corps of Engineers New Orleans, LA (504) 862-1597



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



**Belle Isle Canal to Lock** Bank Stabilization -Freshwater Bayou (TV-11b)



**Shoreline Protection** 

**Project Boundary** 





Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

1 Kilometers

Miles

Background Imagery: 2002 Thematic Mapper Imagery

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